U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Species Account
CONTRA COSTA GOLDFIELDS
Lasthenia conjugens

CLASSIFICATION: Endangered

Federal Register 62-33029 (PDF 83 KB); October 22, 1997

STATE LISTING STATUS AND CNPS CODE:
The California Native Plant Society has placed the species on List 1B (rare or endangered throughout its range). Although it has not been officially listed by the State of California, the Department of Fish and Game considers the species to be "very threatened."

CRITICAL HABITAT: Originally designated in Federal Register 68:46683; August 6, 2003.

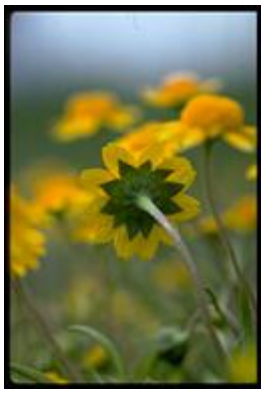
The designation was revised in 70:46923; August 11, 2005.

Species by unit designations were published in 71:7117; February 10, 2006.
www.fws.gov/policy/library/2006/06-1080.html
www.fws.gov/policy/library/2006/06-1080.pdf (6.6 MB)

RECOVERY PLAN: Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon; December 15, 2005.
http://www.fws.gov/sacramento/es/recovery_plans/vp_recovery_plan_links.htm

5-YEAR REVIEW: Completed September 2008 – No change
http://ecos.fws.gov/docs/five_year_review/doc1993.pdf

DESCRIPTION:
Contra Costa (*Lasthenia conjugens*) goldfields is a showy, spring annual herb in the aster family (Asteraceae). It grows to a height of 4-12 inches and usually has an infrequently branched stem. The leaves are opposite, light green, and have a feather-like arrangement, with narrow clefts extending more than halfway toward the stem.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Yellow flowers bloom from March to June. Contra Costa goldfields can be distinguished from similar goldfields by examining the flowers. The partially fused phyllaries (floral bracts, which are reduced leaf-like structures at the base of a flower) and the lack of a pappus (a seed appendage in some species that aids dispersal by acting like a little parachute) distinguish this species from Fremont's goldfields (*L. fremontii*) and Burke's goldfields (*L. burkei*), which it otherwise closely resembles.


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See Hickman (1993) in California Plant References for a detailed description of the species (which was considered extinct when his volume was written).

VERNAL POOLS:

Vernal pools are a unique kind of wetland ecosystem. Central to their distinctive ecology is their ephemeral nature. Vernal pools fill with water temporarily, typically during the winter and spring, and then disappear until the next rainy season.

In California, where extensive areas of vernal pool habitat developed over a long geological timeframe, unique suites of plants and animals have evolved that are specially adapted to the unusual conditions of vernal pools. Fish and other predators are among species that have been excluded evolutionarily byte annual filling and drying cycles of vernal pools.

The prolonged annual dry phase of the vernal pool ecosystem also has prevented the establishment of plant species typical of more permanent wetland ecosystems.

DISTRIBUTION:

Contra Costa goldfields grows in vernal pools within open grassy areas in woodlands and valley grasslands from sea level to 1,500 feet. Currently, 22 populations are believed to be extant in Mendocino, Napa, Marin, Contra Costa, Alameda, Solano and Monterey counties.
See a distribution map (PDF 453KB) from the draft recovery plan.

THREATS:

This species has been extirpated from Santa Barbara and Santa Clara counties by agricultural land conversion, urbanization and creek channelizing. Nearly all of the remaining populations are imminently threatened by urban development or agricultural land conversion.

REFERENCES FOR ADDITIONAL INFORMATION:

Crawford, J.C. and R. Ornduff. 1989. Enzyme electrophoresis and evolutionary relationships among three species of Lasthenia (Asteraceae: Heliantheae). American Journal of Botany. 76(2): 289-296.

Ornduff, R. 1976. Speciation and Oligogenic Differentiation in Lasthenia (Compositae). Systematic Botany 1(1):91-96.

California Plant References www.fws.gov/sacramento/es/plant_spp_accts/plant_references.htm

Both photographs are from CalPhotos, the best source of pictures of California native plants. The website contains information on how to get permission to use larger versions of these and other images of the species.

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